U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

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9/4/97

ELECTRONIC EQUIPMENT MODIFICATION HANDBOOK - NEXT GENERATION WEATHER SUBJ: RADAR (NEXRAD)

CHAPTER 23. REPLACEMENT OF THE TRANSMITTER CONTROL LOGIC BOARD

- 1. <u>PURPOSE</u>. This modification provides instructions to replace the WSR-88D Transmitter Control Logic Board UD3A3A1, part number 706J229G01, with part number 706J716G01. The logic boards are being replaced to ensure proper power-on reset of the transmitter and to correct a focus coil recycle problem. This modification implements Engineering Change Proposal (ECP) 4260-031R1, Retrofit of the Transmitter Control Logic Board.
- 2. <u>DISTRIBUTION</u>. This directive is distributed to selected offices and services within Washington headquarters, the William J. Hughes Technical Center, the Mike Monroney Aeronautical Center, regional Airway Facilities divisions, and Airway Facilities field offices having the following facilities/equipment: NXRAD.
- 3. **WITHDRAWALS**. None.
- 4. **REFERENCES**. None.
- 5. <u>BACKGROUND</u>. This modification will ensure proper power-on reset of the transmitter and correct a focus coil recycle problem. The discontinuance of a microcircuit by one vender resulted in the use of equivalent devices from another vender. The new devices, while meeting all specifications, are sufficiently different to uncover a weakness in the logic design. This change modifies the board so that devices from all vendors reset properly.
- 6. APPLICATION. This modification applies to the following sites:

Bethel, AK Molokai, HI

7. <u>MATERIALS REQUIRED</u>. The following materials are required to modify each unit and are available in kit form, NSN 6660-K3-117-516A, consisting of the following:

DescriptionPart NumberQuantityTransmitter, Control Logic Board706J716G011 eachLabel, Federal ExpressN/A1 each

8. <u>SOURCE OF MATERIALS</u>. Kits will be requisitioned by the Operational Support Facility (OSF) Logistics Section and shipped, at no cost to the site, from:

National Logistics Supply Center (NLSC) 1520 East Bannister Road Kansas City, MO 64131

- 9. **SPECIAL TOOLS AND TEST EQUIPMENT REQUIRED**. None.
- 10. <u>MODIFICATION TO BE PERFORMED BY</u>. Field maintenance personnel or as determined by the regional Airway Facilities division.
- 11. WHEN MODIFICATION IS TO BE PERFORMED. Not later than 60 days after receipt of this directive and kit.
- 12. **ESTIMATED TIME REQUIRED**. A total of 1.0 personnel-hour is required per Transmitter Control Logic Board to accomplish this modification. The personnel performing this task will have maintenance and test experience with the WSR-88D Transmitter. For safety reasons, two technicians are required whenever transmitter

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maintenance is performed.

13. <u>DISPOSITION OF SURPLUS PARTS</u>. Return all removed parts to the National Reconditioning Center (NRC), using the Federal Express label provided in the kit. Mark the return parts sheet with:

NSN, part number, and part name For remarks, write "Part returned for modification"

Return the removed parts immediately to the NRC for modification at the following address:

National Reconditioning Center 1520 East Bannister Road Kansas City, MO 64131

- 14. MODIFICATION PROCEDURE. See attachment 1.
- 15. **TEST AFTER MODIFICATION**. See attachment 1.
- 16. **RESULT OF MODIFICATION**. The WSR-88D products supplied to the end user remain the same.
- 17. CHANGES TO INSTRUCTION BOOKS. None.
- 18. CHANGES TO INSTALLATION DRAWINGS. None.
- 19. CHANGES TO RECORDED DATA. Enter this directive number, date, and chapter number on the appropriate FAA Form 6032-1, Airway Facilities Modification Record. Also, complete the form, attachment 2, and forward to:

System Support Branch, Logistics Section WSR-88D Operational Support Facility 3200 Marshall Ave. Suite 101 Norman, Oklahoma 73072-8028

Fax number: (405) 366-6553

Or e-mail the information to:

khare@osf.noaa.gov

20. <u>CHANGES TO TABLE OF CONTENTS</u>. This chapter will be included in the next revision to the table of contents for Order 6460.2.

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21. **RECOMMENDATIONS FOR CHANGES**. Forward any recommendations for changes to this directive through normal channels to the National Airway Systems Engineering Division, AOS-200, Operational Support.

Signed

George W. Terrell Program Director for Operational Support

2 Attachments